

CN2165524Y《大容量多断口灭磁开关》自第2页13行开始翻译,至第4页第13行止,译文如下:

Attached Figure 1 is the first operation example of this utility model.

The switch device is composed of static iron core(1), moving iron core (2), magnetic yoke (3), coil former (4), coil (5), electromagnetic operating link (6), electrical contact group (7), contact fixed mount (8), signal operating lever (9), signal indicator(10), return spring (11), thrust nut (12), shell (13) flexible gasket (14), buffer spring (15) etc. The static iron core (1) is composed of the constant magnet and corresponding auxiliaries. The moving iron core (2) and magnetic yoke (3) adopt the electrical pure iron with little magnetism or magnetic materials with the same physical properties. The electromagnetic operating link (6) and the contact fixed mount (8) adopt the non-permeable insulating materials. The length of electromagnetic operating link depends on the capacity and pairs of electrical contact on the link. The moving iron core (2), electromagnetic operating link (6) and signal operating lever (9) are in the rigid connecting structure. The upper part of the latter is machined to the square rod shape and the lower part is machined to the column bolt whose some threads are exposed outside the thrust nut (12). The signal indicator (10) is made in removable structure, whose upper center is provided with a proper square hole fitting with the signal operating lever (9). Therefore, the installed signal indicator can not axially rotate along the signal operating lever, but it can move axially, in parallel and upward. With the fit of return spring (11) and thrust nut (12), the installation height of signal indicator (10) shall ensure the following: when the switch device is in "switch on" status, this indicator shall be fully concealed in the base line of shell (13); when the switch device is in "switch off" status, this indicator is exposed to the outside of base line of shell (13). It indicates the working status of the switch device with its appearance color in strong contrast with the surrounding environment. The lower center of the signal indicator (10) is provided with an open round hole whose diameter is somewhat bigger than the external diameter of the hand operating bar (16). Usually, this structure can prevent the unintentional touch of end bolt of signal operating lever (9) or unintentional push of signal indicator (10) which will cause the accidental operation of switch device.

To operate the switch device manually, use the special hand operating bar (16). When the concaved threaded sleeve at the front end of this bar meshes with the end column

bolt at the back end of the signal operating lever (9) for five or six threads, manually push or pull the moving iron core (2) with the sliding handle at the end of the bar, thus realizing the manual operation of the switch device. In order to prevent the misoperation, the hand operating bar (16) shall be dismantled at other times.

Attached Figure 2 is the second operation example of this utility model. Its difference from the first example lies in that: the moving iron core (2) is composed of the constant magnet and corresponding auxiliaries. Its appearance is different from that in the first operation example. The static iron core (1) and magnetic yoke (3) are composed of the electrical pure iron with little magnetism or magnetic materials with the same physical properties. Except this, all component numbers, materials, structures, operating principles and auxiliaries etc. are the same with those in the first operation example in Attached Figure 1.

Attached Figure 3 is the third example of this utility model.

The static iron core (1), moving iron core (2), magnetic yoke (3), coil former (4), coil (5), electromagnetic operating link (6), return spring (11), shell (13), flexible gasket, (14), buffer spring (15) constitute the basic unit of the tractive electromagnet. Their component numbers, materials, structures and operating principles are the same with those in the first operation example in Attached Figure 1. The combination switch frame (18) and the horizontal rigid link (20) connect the above two tractive electromagnet basic units to be a new whole: the static contact of the electrical contact group (7) is fixed on the combination switch frame (18) by the conducting busbar frame (22) and the insulator foot (21). The moving contact point and the contact spring (not indicated) is fixed on the horizontal rigid link (20) by the insulator foot (21). The synchronous guide rail (19) enables the min. deviation angle in the axial vertical motion of the operating link (6), so that the main contacts of each phase of the combination switch can close or break synchronously. The removable arc chute (23) is fixed outside the electrical contact (7). The lead-out joints (24) are located at the two sides of the combination switch frame (18), directly connected to the distribution busbars. This operating principle is the same with the foresaid basic operating principle of this utility model. Only one point needs to be supplemented, that is, the coil (5) of the two tractive electromagnets shall be connected to one control circuit in parallel or in series.